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Amendments to the Specification:

Please add the following paragraphs following paragraph [0007] (which is the location immediately at the top of page 3, in the specification as filed):

[0007-01] In another aspect, a method of configuring a communications path in a communications network from a start node to an end node through intermediate nodes is provided. The method comprises: establishing a partial path for the communications path using at least one communications link associated with a first routing scheme from the start node to a terminating node in the intermediate nodes; and at the terminating node, if another communication link associated with the first routing scheme to a next-hop node towards the end node does not exist in the plurality of intermediate nodes, then conducting subsequent steps. The subsequent steps comprise: establishing the terminating node as an interim egress node for the communications path; notifying the start node of mapping parameters for the partial communications path to the terminating node; initiating establishment of a secondary communications path associated with another routing scheme differing from the first routing scheme from the terminating node to the end node through at least one node downstream from the terminating node in the intermediate nodes; and notifying the start node of parameters for the secondary communications path to the end node after establishment of the secondary communications path. In the method, the partial communications path and the secondary communications path combine to form the communications path from the start node to the end node.

[0007-02] In the method, the another routing scheme may be IP forwarding and may not necessarily use MPLS.

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[0007-03] In the method, the mapping parameters may comprise a hop count associated with the partial path.

[0007-04] In the method, establishing the partial path may be performed on a node by node basis, and the first routing scheme may follow a MPLS routing scheme.

[0007-05] In another aspect, a method of establishing a signalled label switched path (SLSP) in a MPLS communications network is provided. In the network each router thereof has at least one label distribution protocol (LDP) peer router. The method comprises: executing a packet routing task on each router in accordance with a packet routing protocol so as to enable each router to forward a data packet to a next-hop router based on a network address carried by the data packet; storing, on each router, a list of SLSPs which egress at the router, each the SLSP being associated with a forward equivalency class (FEC) based on a network destination; and in the event a given router identifies a new LDP peer router, traversing the corresponding list of egress SLSPs at the given router to identify the FEC corresponding to each listed SLSP, requesting the next-hop router from the routing task for each the FEC, and in the event the routing task identifies the next-hop router for a given one of the FECs to be the new LDP peer router, and extending the corresponding listed SLSP to the new LDP peer router from the given router.

[0007-06] In the method, extending the corresponding listed SLSP to the new LDP peer router may include updating the lists of SLSPs at the given router and the new router with information relating to the corresponding listed SLSP.

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[0007-07] In another aspect, a method of establishing a SLSP in a MPLS communications network is provided. In the network, each router has at least one LDP peer router. The method comprises: signalling the establishment of the SLSP across the network from an ingress router to an egress router; storing on the egress router an indication that the SLSP egresses thereat, the SLSP being associated with a FEC based on a network address; executing a packet routing task on the egress router, the routing task enabling the egress router to forward a data packet to a next-hop router based on a network address carried by the data packet; and in the event the egress router identifies a new LDP peer router subsequent to the establishment of the SLSP, and extending the SLSP to the new LDP peer router provided that the routing task indicates that the next-hop router for the given FEC is the new LDP peer router.

[0007-08] In the method, extending the SLSP to the new LDP peer router may include storing on the new LDP peer router another indication that the SLSP egresses thereat.

[0007-09] In another aspect, a router for use in a communications network is provided. The router comprises: one or more input ports for receiving packets from the network and one or more output ports for transmitting packets to the network; packet routing logic for enabling the router to identify a next-hop router for forwarding a data packet based on a network address carried by the packet; switching logic for enabling packets to be switched between the input ports and the output ports based on a label carried by each packet; signalling logic for enabling a signalling link to be established with a signalling peer router, the signalling link being used to establish a bearer channel link for a SLSP; and a MPLS routing logic for storing a list of SLSPs which egress at the router and for associating each the SLSP with a FEC based on a network destination. In the router, the signalling logic informs the MPLS routing logic when a new

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signalling link is established to a new signalling peer router and in response thereto the MPLS routing logic (a) traverses the list of egress SLSPs to identify the FEC corresponding to each listed SLSP, (b) requests the next-hop router from the packet routing logic for each the FEC, and (c) extends the corresponding listed SLSP to the new signalling peer router provided that (d) the packet routing logic identifies the next-hop router to be the new signalling peer router.

[0007-10] In the router, the signalling logic extends the corresponding SLSP to the new signalling peer router by storing, on the new signalling peer router, information relating to the corresponding SLSP on a list of SLSPs.

[0007-11] In another aspect, a router for use in a MPLS communications network is provided. The router comprises: packet routing logic for identifying a next-hop router for forwarding a data packet based on a network destination carried by the packet, the packet routing logic being operative to change the identities of the next hop-routers from time to time for various network destinations; signalling logic for establishing a signalling link with a signalling peer router, the signalling link being used to establish a bearer channel link for a SLSP; and MPLS routing logic operative to store (i) a first list of signalling links to signalling peer routers and (ii) a second list of SLSPs transiting the router, each such transit SLSP being associated with a network destination. In the router, if the packet routing logic informs the MPLS routing logic of a new next-hop router for a given network destination, the new next-hop router being different from an old next-hop router for the given network destination, and in response thereto the MPLS routing logic determines from the second list whether a transit SLSP is associated with the given network destination, then the MPLS routing logic instructs the signalling logic to establish a

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bearer channel link for the corresponding transit SLSP to the new next-hop router provided that the first list indicates that a signalling link exists between the router and the new next-hop router.

[0007-12] In the router establishment of the bearer channel link for the corresponding transit SLSP to the new next-hop router, the old next-hop router may no longer necessarily be used to transit the corresponding transit SLSP.

[0007-13] The router may communicate packet routing protocol messages and signalling protocol messages with a second router over a common physical interface. The packet routing logic may indicate a first communication failure over the common physical interface with the second router after a first predetermined time period has elapsed without a predetermined event having occurred. The signalling logic may indicate a second communication failure with the second router after a second predetermined time period has elapsed without the predetermined event having occurred. Also, the first time period may be shorter than the second time period.

[0007-14] In the router in the event the second communications failure is indicated, the MPLS routing logic may signal the release of SLSPs associated with a particular signalling link using the common physical interface, and the relative durations of the first and second time periods may be selected so as to enable the packet routing logic to select a new next-hop router for data packets formerly forwarded to the second router prior to the release of one or more SLSPs associated with the particular signalling link.

[0007-15] In the router, the predetermined event may be reception of a protocol message from the second router.

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[0007-16] In another aspect, a method of routing a SLSP in a MPLS communication network having interconnected label-switching routers is provided. The method comprises: executing a packet routing task on each router in accordance with a packet routing protocol so as to enable each router to forward a data packet to a next-hop router based on a network address carried by the data packet, the packet routing protocol being operative to vary from time to time the identities of the next hop-routers for various network destinations; executing a label distribution task on each router in accordance with a LDP so as to enable each router to signal path establishment messages with an LDP peer router over a signalling link; storing, on each router, (i) a first list of LDP signalling links to peer routers and (ii) a second list of SLSPs transiting the router, each such transit SLSP being associated with a network destination; and in the event the packet routing task associated with a given router identifies a new next-hop router for a given network destination, the new next-hop router being different from an old next-hop router for the given network destination, determining from the second list that a particular transit SLSP is associated with the given network destination and, provided that the first list indicates that an LDP signalling link exists between the given router and the new next-hop router, signalling a path establishment message to progress the particular transit SLSP to the new next-hop router.

[0007-17] In the method, after the particular SLSP is progressed to the new next-hop router, the old next-hop router may no longer necessarily be used to transit the particular transit SLSP.

[0007-18] In another aspect, a method of operating a MPLS communications network having interconnected nodes is provided. The method comprises: executing a packet routing task on each node in accordance with a packet routing protocol so as to enable each node to

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forward a data packet to a next-hop node based on a network address carried by the data packet, executing a signalling task on each node in accordance with a signalling protocol so as to enable each node to signal the establishment of bearer channel links for SLSPs with another node over a signalling link ; storing, on each router, (i) a first list of signalling links to signalling peer nodes and (ii) a second list of SLSPs transiting the node, each such transit SLSP being associated with a network destination; and in the event the packet routing task associated with a given node identifies a new next-hop node for a given network destination, the new next-hop router being different from an old next-hop router for the given network destination, determining from the first second list that a particular transit SLSP is associated with the given network destination and, provided that the first list indicates that a signalling link exists between the given node and the new next-hop node, signalling a request to establish a bearer channel link with the new next-hop node in order to progress the particular transit SLSP thereto.

[0007-19] In the method, after the bearer channel link with the new next-hop node is established, the old next-hop node may no longer necessarily be used to transit the particular transit SLSP.

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